

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

5



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,733	12/19/2000	Doug Billings	6727/OI088	4191
7278	7590	10/05/2004	EXAMINER	
DARBY & DARBY P.C. P. O. BOX 5257 NEW YORK, NY 10150-5257			SINGH, RACHNA	
			ART UNIT	PAPER NUMBER
			2176	

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

8

<b>Office Action Summary</b>	<b>Application No.</b> 09/740,733	<b>Applicant(s)</b> BILLINGS ET AL.	
	<b>Examiner</b> Rachna Singh	<b>Art Unit</b> 2176	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### DETAILED ACTION

1. This action is responsive to communications: Application filed 12/19/00.
2. Claims 1-29 are pending. Claims 1, 13, 25, 26, 28, and 29 are independent claims.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 6-10, 13-15, 18-22, and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duane et al., US 6,243,721 B1, 6/5/01 (filed 1/31/97).

In reference to claims 1, Duane teaches a method and apparatus for providing layout capabilities for computer forms containing control items. See abstract.

Compare to ***"a method of processing a document that includes a plurality of fields having respective contents"***. Duane discloses automatically inserting, aligning, and linking a label with an object when an object is inserted into a computer form. See column 2, lines 27-36. Duane teaches automatically creating a label to be associated with the new control item. Selecting a new control item is done from a list of control items, each control item including a separate, self-contained field for simplifying and organizing information on said computer form and for facilitating data entry into or output from said computer form, each separate field including a label. See column 23. Creating a label involves creating a new label box in response to detecting

Art Unit: 2176

that a new control item is being placed onto the form. The new label box is then placed on the computer form. Compare to ***“providing labels to be assigned respectively to the fields and one or more rules applicable to the contents of the field according to the labels assigned thereto; reading the contents of the fields; and assigning the labels to the fields responsive to application of the rules to the contents”***.

Duane does not explicitly state “one or more rules applicable to the contents of the field. . .reading the contents of the fields. . .application of the rules to the contents”.

Duane does teach a “field chooser” in which a user selects a field with a rule attached to it. See figure 7. Upon choosing the field, the system then automatically assigns a label to the control item. It would have been obvious to a person of ordinary skill in the art at the time of the invention that Duane’s automatic assignment of labels to a control item takes into consideration the rules of the content since Duane’s field selection has certain “rules” associated with the field. Thus a person of ordinary skill in the art would interpret Duane’s field selection to include the rules applicable to that field that are ultimately used to automatically assign a label to the control item. See column 2, lines 27-37. Furthermore, a person of ordinary skill in the art at the time of the invention would be motivated to utilize an automatic labeling system in order to save time spent by the user manually inserting labels. See column 2.

In reference to claims 2 and 3, Duane teaches a field chooser in which rules associated with the field are inherent. The relation between the contents of two or more fields may be included in these rules. See figure 7. For example, “message” and “message flag” may have rules relating the two fields. Furthermore, Duane teaches

Art Unit: 2176

the positioning, alignment, and spatial organization to be relative to other control items.

See columns 3-4.

In reference to claim 6, Duane teaches positioning new control items in a spatial organization relative to neighboring control items. This includes placing, aligning, and sizing the control items in an appropriate position relative to other items. See columns 3-4.

In reference to claims 7-8 and 9-10, Duane does not teach making a text assignment wherein all possible assignments of the labels are tested or assigning labels to the rules wherein the step comprises finding candidate assignments of all the labels to the respective fields.; however, he does teach automatically inserting, aligning, and linking a label with an object when an object is inserted into a computer form. See column 2, lines 27-36. Duane teaches automatically creating a label to be associated with the new control item. Creating a label involves creating a new label box in response to detecting that a new control item is being placed onto the form. The new label box is then placed on the computer form. Duane also teaches alignment of the label in which adjustments are made to place labels in the appropriate location and coordinates. See abstract. A person of ordinary skill in the art at the time of the invention would realize that Duane's alignment of the label is testing the assignment relative to the fields to place it in the appropriate location.

Claims 13-15 and 18-22 are rejected under the same rationale used above in claims 1-3 and 6-10 respectively.

Claim 25 is rejected under the same rationale used in claim 1 above.

Claims 26, 28, and 29 are rejected under the same rationale used in claim 6 above.

In reference to claim 27, Duane teaches that the form can comprise a plurality of fields which could include a form that is a table. See column 1.

5. Claims 4-5 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duane et al., US 6,243,721 B1, 6/5/01 (filed 1/31/97) in view of Hetherington, US 2002/0010714 A1, 1/24/02 (filed 7/3/01, divisional filed 8/6/98).

In reference to claims 4-5 and 16-17, Duane teaches that contents of the fields can include text, graphics, control items, and other objects. See column 1, lines 10-27. Duane, however, does not teach that the relation between contents is a mathematical relationship or a semantic relationship. Hetherington teaches a method of examining elements of data to determine attributes and examining the content of the elements and the contextual relationships to each other to determine semantic and syntactic information about the data. See page 17, paragraph [0370]. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Hetherington's relationship matching in the system of Duane in order to assign labels to the control items in an appropriate manner relative to the type of relationship among the different fields.

6. Claims 11-12 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duane et al., US 6,243,721 B1, 6/5/01 (filed 1/31/97) in view of Gupta et al., US 6,199,079 B1, 3/6/01 (filed 3/20/98).

In reference to claims 11 and 12, Duane does not teach that the document comprises a plurality of form documents sharing a common layout and that the assignment is made with respect to all form documents. Duane also does not teach that the assignment comprises choosing the assignment so as to satisfy a statistical criterion with respect to the satisfaction of the rules by the contents of the fields. Gupta, however, teaches identifying and matching identifiers from a form to a plurality of pages. See figure 1D and columns 9-10. The attributes are obtained from a first page and a matching pattern is determined to use the information for subsequent forms. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Gupta's recognition of patterns of data in fields of different forms to the system of Duane as it extends its use to more than one document thus allowing fields of multiple documents to be labeled appropriately thus saving time spent by a user manually entering labels for common fields among multiple documents.

Claims 23-24 are rejected under the same rationale used in claims 11-12 respectively above.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Breslau et al. US 6,499,041 B1

Rawat et al. US 6,662,340 B2

Gusack US 6,356,897 B1




Art Unit: 2176

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachna Singh whose telephone number is 703.305.1952. Starting in mid-October, the examiner should be reached at 571-272-4099. The examiner can normally be reached on M-F (8:30-5).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 703.305.9792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RS  
9/14/04

  
JOSEPH FEILD  
SUPERVISORY PATENT EXAMINER